

ABSTRACT

A top sealing plate used for a battery includes a filter, a cap, and a valve body. The filter has a valve hole and upper opening; the cap has a convex portion and a flange portion disposed around the convex portion; the opening end of the upper opening of the filter has a bend portion; and the outer periphery end of the flange portion of the cap and the bend portion are caulked and joined to each other. The caulked portion includes both states of contact, that is, a strong contact portion and a weak contact portion, between the surface of the outer periphery end of the flange portion and the bend portion. By this configuration, the electric contact resistance between the cap and the filter will be greatly reduced. In addition, the contact resistance is stabilized at a low level. Further, the internal resistance of the battery is lowered, thereby improving the battery performance.